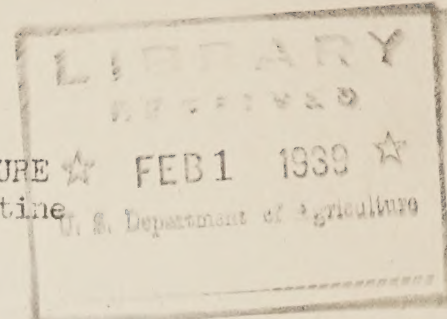


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.9
Eng 86
1939
copy 2

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Entomology and Plant Quarantine
Washington, D. C.



December 30, 1938.

Summarized in the attached statement are the results of the past season's trap-scouting to determine distribution of the Japanese beetle. Included as part of the record is a list showing points outside the present regulated area at which beetles were captured, together with comparisons of previous years' trap catches in nonregulated territory.

As now contemplated, quarantine area revision based on the present season's scouting will be limited to local extension of the zone in Maryland, New York, Ohio, Pennsylvania, Virginia, and West Virginia. Soil treating programs to suppress established infestations within the respective States have been completed in Georgia, Illinois, Kentucky, Michigan, and Missouri. Lead arsenate was also applied to the infestations in Erie and Oil City, Pa. Early spring treatments of the Indiana infestations are assured. Quarantine action will be deferred for the present in North Carolina and in Brighton and Rochester, N. Y., to afford interested State and local officials an opportunity to organize treating programs in the infested communities. All major infestations in North Carolina are now subject to State regulations closely paralleling Federal quarantine restrictions.

These control measures are considered adequate to eliminate the hazard of interstate spread of the insect from nonquarantined States. Accordingly, no quarantine hearing will be held at this time to consider the extension of the regulated zone or modification of the regulations. The accompanying statement is issued in lieu of the report usually given at quarantine hearings. It makes available to State quarantine officials and other interested parties the latest information on the distribution of this insect.

LEE A. STRONG,

Chief of Bureau.

JAPANESE BEETLE CONTROL OPERATIONS DURING 1938

All the principal field stations of the Bureau of Entomology and Plant Quarantine throughout the United States were utilized during the past summer in a Japanese beetle trapping survey. Starting in April and extending into July, small lots of traps were sent to the field stations. A total of 1,920 traps was distributed in lots of a dozen each to 160 Bureau field stations in 36 States, including 29 nonquarantined States, and 7 States partially infested. The only States not represented in this bureau-wide field survey were Arkansas, Nevada, Oklahoma, South Dakota and Kentucky. The Bureau's regularly scheduled trapping program took care of trap-scouting in Kentucky. This left only four States that were not trapped to some degree in this season's program. In only two instances were beetles caught in traps set and tended by staff members of the field stations. A solitary beetle each was caught at Sandusky, Ohio and Savannah, Georgia.

This summer the Bureau cooperated in a large-scale Japanese beetle control campaign inaugurated by the State of Maryland. Approximately 40,000 traps were operated in the State during the summer. Part of these were loaned by the Bureau but the majority were the property of the State. Total trap catches during the season amounted to 123,166 quarts of beetles. These would weigh 42.3 tons. Trapping was carried on in 89 cities, towns and villages. In heavily infested areas in Cecil, Baltimore, Kent, Somerset and Worcester counties, demonstration trapping was sponsored on farms. The control program was designed to retard and control the insect in infested areas. Educational work was an essential part of the program. Demonstrations of spraying and soil treatment, colonization of parasites, and adjustment of planting dates were several phases of the summer's control activities.

The regular trapping program was carried on in 18 States. At the seasonal peak, 97,786 of the scouting-type traps were in operation. A total of 341 trap inspectors was employed, usually for 30 working days, to place and tend the traps.

Traps were distributed in 402 cities and towns. Throughout the season beetles were caught at 95 of the trapping points. Only 37 of these were first-records, the remainder being sparse infestations carried over from previous years.

The only first-record infestations showing enough beetles to warrant quarantine or control measures were confined to the partially-regulated States. Three first-record infestations in Illinois were of 1 or 2 beetles each. The same was true in the case of a single first-record in Iowa, 2 in Michigan, and 3 in North Carolina. In States partially under regulation, first-record collections were made in 3 localities in Maine, 4 in Maryland, 8 in New York, 9 in Ohio, and 4 in Virginia. Of these the only infestations of an established nature that would warrant soil treatment or quarantine extension were those at Jefferson, Lander, and Queen Anne, Md.; Mount Morris and Brighton, N. Y. -- the latter a suburb of Rochester; and Dennison, Dover and Newark, Ohio. Some of the incipient or negligible infestations--ranging from 1 to 10 beetles each--will probably be included in the regulated area because of their proximity to the main regulated zone or due to their location between the main regulated area and some of the more important infestations that may be placed under regulation.

Of considerable more consequence than the first-record infestations were the increased beetle populations in quite a number of cities and towns in which the insect had been captured in previous years. Soil treating programs have been quite extensive, in many of the localities showing substantial population increases.

Since trapping operations began in May of this year, Bureau spray trucks have been utilized in cooperative soil poisoning operations in 10 cities. Acreage sprayed approximated 480. There has been no change in the standard dosage of 1,000 pounds of lead arsenate per acre for control of isolated infestations. Most extensive of the soil treating jobs was that in Chicago. Here 162 acres were treated to cover the sections where most of the beetles were caught in the city this summer. A consistently good soil treating program in Chicago has effected progressive reductions in the annual finds, starting at 3,740 in 1936, and tapering off to 384 last year and 330 this summer.

Twenty-seven beetles were captured in St. Louis this summer which may be compared with the taking of a lone beetle there in 1937. There is cause for encouragement, however, in the fact that only one of the beetles trapped this summer was taken in a section that had received lead arsenate application in any year since the treating program began there in 1934.

The principal quarantine expansion growing out of this year's trap survey will be in Ohio, where a few counties will

probably be added and several additional island-type quarantined areas set up to add a few of the established isolated infestations. The State has under consideration plans to treat some of the more important infestations, thereby keeping them out of the regulated zone.

Completion of soil treatments in Detroit, Mich., Oil City and Erie, Pa., Louisville, Ky., Atlanta, Ga., and Winchester and Harrisonburg, Va. avoids quarantine action in these cities for the coming year. Assurances have been received from the State Entomologist of Indiana that their treating program will be continued next spring to include the principal infestations discovered there this season. Minor extensions of the area to take in a few infestations are indicated in Maryland, New York, Pennsylvania, Virginia and West Virginia. At the request of the North Carolina officials, quarantine action in that State is being deferred at least until spring while an effort is made to organize a control program. Regulation of the movement of host material from the infested communities in the State continues under existing State quarantine regulations.

Following the trapping of 75 beetles in Rochester, N. Y. in 1937, soil treatment was done on the strength of which quarantine action was withheld. This year's trapping shows that infestation in the city is more widespread than disclosed last year. In addition, a comparatively heavy, though localized, infestation has been found in Brighton, adjoining the city on the south. A conference to discuss the Rochester situation was held there on December 13. At that time State officials and northern New York nurserymen expressed a desire to attempt a repetition of the soil treating program. Quarantine action is accordingly being temporarily withheld to permit further consideration of spring treatments in these two communities.

JAPANESE BEETLE TRAPPING
OUTSIDE PRESENT REGULATED AREA
1922 - 1938

- 5 -

Location	1938	1937	1936	1935	1934	1933	1932
	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.
<u>GEORGIA</u>							
Atlanta	3033	122	6	-	-	-	400
Augusta	-	-	-	-	-	-	400
Savannah	12	1	-	-	-	-	400
<u>ILLINOIS</u>							
Chicago	9926	330	384	7500	3740	3065	39
Cicero	600	5	1	-	-	1033	6
East St. Louis	800	1	3	1102	2	804	1
Elgin	385	-	1	-	-	-	-
Evenston	600	1	20	-	-	-	-
<u>INDIANA</u>							
East Chicago	300	1	-	-	-	-	-
Elkhart	300	2	-	-	-	-	-
Ft. Wayne	1600	20	18	399	5	-	-
Indianapolis	3600	10	12	3500	28	792	17
Logansport	400	8	1	300	-	2434	57
South Bend	1600	8	43	800	3	-	-
Whiting	100	1	-	200	-	-	-
<u>IOWA</u>							
Ft. Madison	200	1	-	-	-	-	-
<u>KENTUCKY</u>							
Lexington	597	1	1	391	400	-	-
Louisville	1566	62	10	800	800	-	-

1931

Atlanta, Ga. 24 traps - no beetles
Savannah, Ga. 300 traps - no beetles
Chicago, Ill. 300 traps - no beetles

Location	1938	1937	1936	1935	1934	1933	1932
	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.
MAINE							
Augusta	300	-	253	200	1	296	148
Bangor	260	3	301	293	1	388	200
Bath	200	2	175	203	-	202	-
Brunswick	200	1	71	84	-	60	-
Ellsworth	100	1	125	72	-	-	-
MARYLAND							
Beverly Beach	-	10	10	-	-	-	-
Cockeysville	50	10	15	25	-	50	46
East New Market	100	25	20	25	2	10	-
Eastport	203	10	10	-	-	-	-
Edgemont	-	5	-	-	-	-	-
Emmitsburg	96	55	50	50	1	65	60
Freeland	-	10	-	-	-	-	-
Glyndon	-	-	10	-	-	10	48
Hampstead	149	-	10	-	-	40	101
Hancock	102	-	24	23	-	-	304
Hereford	-	10	10	10	1	25	-
Hughesville	64	10	14	20	-	20	-
Hurlock	100	35	25	25	18	50	94
Jefferson	3	59	-	-	-	-	5
Kenwood Beach	-	10	-	-	-	-	-
Keymar	-	12	-	-	-	-	19
Lander	41	17	-	-	-	-	-
Leonardtown	192	10	20	25	3	40	-
Lisbon	-	7	-	-	-	-	-
Mechanicsville	50	10	10	10	-	20	-
Mount Airy	157	-	25	50	1	83	-
Mount Savage	-	25	20	-	-	70	-
North Beach	-	10	10	-	-	-	-

Location	1933	1937	1936	1935	1934	1933	1932
	Traps J. B. Traps J. B. Traps J. B. Traps J. B. Traps J. B. Traps J. L. Traps J. L.						
MARYLAND (Cont'd.)							
Preston	126	75	15	-	20	25	1
Queen Anne	90	273	-	-	-	-	92
Reisterstown	-	-	25	-	-	40	-
Ridgeville	24	9	-	-	-	10	108
Riviera Beach	-	-	-	-	-	-	-
Rockville	-	-	40	51	10	-	-
Savage	101	156	10	11	30	50	6
Seaside Park	-	-	15	3	-	-	100
Shadyside	82	-	10	-	-	-	-
Solomons Island	-	-	10	1	-	-	-
Taneytown	148	21	10	10	11	25	2
Thurmont	106	2	50	-	75	85	105
Union Bridge	-	-	-	-	50	78	186
Westernport	100	-	-	2	-	50	-
Woodensburg	-	-	40	1	44	75	1
	-	-	10	-	-	-	-
MICHIGAN							
Dearborn ***	780	1	796	1	398	-	-
Detroit	5313	82	5045	128	4686	792	1042
Highland Park	200	2	200	-	-	-	4
Pontiac	50	1	398	-	-	144	-
MISSOURI							
St. Louis	12500	27	12557	88	11562	2604	1351
NEW HAMPSHIRE							
Woodsville	12	-	-	-	100	202	1

	1931	1930	1929
Dearborn, Mich.***	200 traps - no beetles	100 traps - no beetles	no traps
Detroit, Mich.	100 traps - no beetles		

Location	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095	3096	3097	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	3225	3226	3227	3228	3229	3230	3231	3232	3233	3234	3235	3236	3237	3238	3239	3240	3241	3242	3243	3244	3245	3246	3247	3248	3249	3250	3251	3252	3253	3254	3255	3256	3257	3258	3259	3260	3261	3262	3263	3264	3265	3266	3267	3268	3269	3270	3271	3272	3273	3274	3275	3276	3277	3278	3279	3280	3281	3282	3283	3284	3285	3286	3287	3288	3289	3290	3291	3292	3293	3294	3295	3296	3297	3298	3299	3300	3301	3302	3
----------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

Location	1938	1937	1936	1935	1934	1933	1932
	Traps J. L.	Traps J. L.	Traps J. L.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.
<u>NORTH CAROLINA</u>							
Charlotte	-	738	400	400	-	396	-
Durham	800	394	399	383	-	396	192
East Spencer	-	189	73	-	-	-	-
Elizabeth City	200	197	192	192	-	202	-
Fayetteville	196	-	200	200	-	200	400
Goldsboro	-	-	200	200	-	200	-
Greensboro	-	384	779	400	-	396	-
Henlet	100	-	-	-	-	51	-
Henderson	98	-	60	100	-	175	-
High Point	600	400	396	371	-	300	-
Kinston	200	-	200	200	-	196	-
Lexington	158	-	-	150	-	99	-
Lumberton	-	-	99	100	-	75	-
Murfreesboro	-	-	-	-	-	36	-
Oxford	-	-	40	50	-	100	-
Releigh	600	397	400	400	-	396	204
Rocky Mount	400	393	400	395	-	275	9
Salisbury	-	407	526	300	-	171	-
Sanford	96	-	99	100	-	100	-
Spencer	-	200	206	200	-	26	-
Statesville	200	-	200	200	-	200	-
Thomasville	181	-	200	200	-	96	-
Lake Forest	-	-	25	35	-	60	-
Washington	94	-	-	-	-	146	-
Wilmington	100	380	400	347	-	395	400
Wilson	200	200	200	200	-	196	-
Winston-Salem	-	1158	1212	700	-	396	10
		273	37	109	-	5	
<u>OHIO</u>							
Ashtabula	397	212	299	103	100	216	250
	126	129	-	-	-	-	-

1931
300 traps - no beetles
Wilmington, N. C.

Location	1938	1937	1936	1935	1934	1933	1932
	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.
<u>OHIO (Cont'd)</u> Bellaire							
Belpre	-	198	200	200	-	-	-
Dexley	36	12	-	-	-	-	-
	50	200	-	-	-	-	-
Carrollton	40	-	-	-	-	-	-
Chillicothe	-	297	300	171	132	132	-
Cincinnati	1200	950	973	800	-	396	-
Cleveland Hys.	400	399	-	-	-	-	400
Conneaut	196	200	200	95	100	-	-
Lennison	194	-	-	-	-	-	-
Lover	186	144	-	-	-	-	-
East Cleveland	400	400	-	-	-	-	-
Gallipolis	197	199	100	-	-	-	-
Lancaster	196	-	280	300	-	-	-
Manassfield	400	392	400	400	-	192	-
Marietta	260	284	300	200	-	196	-
Newark	175	155	200	395	-	198	-
Orville	80	-	-	-	-	-	-
Sandusky	12	382	200	-	-	-	-
Uhrichsville	100	-	-	-	-	-	-
Washington C. H.	-	198	-	125	132	1	-
Wooster	200	193	200	100	-	-	132
Zanesville	-	398	400	396	-	198	246
<u>PENNSYLVANIA</u>							
Erie	2355	343	1593	1597	114	1200	774
Oil City	399	26	-	-	-	-	193
Sharon	507	177	400	-	-	92	-

1931

Cincinnati, Ohio 300 traps - no beetles
 Erie, Penna. 600 traps - 22 beetles

Location	1938	1937	1936	1935	1934	1933	1932
	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.	Traps J. B.
<u>SOUTH CAROLINA</u>							
Charleston *	794	783	730	755	-	-	800
Florence	12	297	300	306	-	-	201
Greenville	765	750	794	799	89	1	-
<u>TENNESSEE</u>							
Bristol	172	151	175	-	-	-	-
<u>VIRGINIA</u>							
Ashland	29	60	50	100	7	4	-
Bon Air	-	12	10	5	6	-	-
Bristol	196	145	125	-	-	-	-
Buena-Vista	99	100	100	-	-	-	-
Charlottesville	-	397	400	299	30	6	400
Clifton-Forge	-	84	100	-	-	-	-
Colonial Beach	55	14	15	-	-	-	-
Danville	-	375	400	383	204	-	-
East Highland Park	-	-	-	8	-	-	-
Emporia	-	32	30	60	7	3	-
Front Royal	52	-	25	-	48	1	61
Harrisonburg	199	197	200	200	228	1	173
Hopewell	130	200	200	200	180	1	-
Luray	44	-	25	40	40	-	47
Lynchburg	-	789	399	394	192	-	400
Milford	17	10	5	-	12	-	-
New Market	20	-	25	25	25	-	24
Orange	30	30	-	48	48	1	-
Petersburg	-	400	400	395	216	-	200
Petersburg-Pike	-	2	-	30	-	-	-
Pulaski	-	90	150	143	-	-	-

*Charleston, S.C.
 1931
 300 traps - 4 beetles

Location	1938	1937	1936	1935	1934	1933	1932
	Traps J. B. B.	Traps J. B. B.	Traps J. B. B.	Traps J. B. B.	Traps J. B. B.	Traps J. B. B.	Traps J. B. B.
<u>VIRGINIA (Cont.)</u>							
Roanoke	-	757	800	406	204	396	400
Route 2 *	2	-	-	-	-	-	-
South Hill	-	20	15	-	-	41	-
Staunton	198	200	200	192	192	225	135
Wakefield (see Washington's Birth Place)	-	-	-	-	-	-	-
Warsaw	15	10	9	-	-	15	-
Washington's Birth Place	300	15	-	-	-	-	-
Waynesboro	-	-	100	96	-	114	-
Winchester	383	300	301	300	276	296	186
							7
<u>WEST VIRGINIA</u>							
Berkeley Springs	30	-	-	35	36	-	-
Charleston	400	403	353	396	396	395	-
Charles Town	58	13	-	-	36	-	400
Huntington	593	796	400	400	-	198	-
Martinsburg	400	400	400	396	264	396	400
Moundsville	-	200	-	200	-	132	-
Phillipi	-	60	-	-	-	-	-
Princeton	-	100	97	150	168	132	-
							2

*State Route 2 about three miles south of Fredericksburg - Telephone pole 1887, Trap No. 24, 1 female
State Route 2 and County Road 609 near intersection D. M. Poast, Resident-Trap #2, 1 male

**From Cooper's Quarterly Report - July 1 - Sept. 30.

